

The Weekly Rigor

No. 292

“A mathematician is a machine for turning coffee into theorems.”

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10 Problems in Solving First-Degree Equations Involving Fractional Forms (Part 1)

PROBLEMS

Solve each equation, beginning by using the method of “clearing fractions.”

1. $\frac{x}{2} - \frac{5}{6} = \frac{1}{2} + \frac{x}{6}.$

2. $\frac{x}{2} + \frac{x}{6} = 4 - \frac{x}{3}.$

3. $\frac{x}{2} + \frac{x}{3} = \frac{16}{3} + \frac{14}{3}.$

4. $\frac{x}{2} - \frac{x}{6} + 3 = \frac{x}{5} + \frac{23}{5}.$

$$5. \frac{2x}{3} + \frac{x-1}{6} = \frac{3x+1}{2} - 10.$$

$$6. 2x + \frac{x}{4} = 9.$$

“Only he who never plays, never loses.”